# Installation Guide MIL-S3120 4-port 10/100 Dual Speed Switch MIL-S3130 8-port 10/100 Dual Speed Switch 

## INTRODUCTION

Thanks for purchasing one of the MIL-S3100 family of dual speed switches. They provide a dedicated bandwidth of $10 / 100 \mathrm{Mbps}$ throughput per port to the desktop. With features like auto-negotiation and half/full duplex, these switches offer smooth network migrations and easy upgrades to network capacity.

The MIL-S3100 family of dual speed switches has the following features:

- Complies with IEEE802.3, IEEE802.3U standard
- 4 or $810 / 100 \mathrm{Mbps}$ switching ports
- Auto-Negotiation is supported for each port.
- One up-link port provided for cascading
- Visual diagnostic LED's supported
- Palm size
- External power adapter


## Package contents

Before you begin, verify that your package contains the following items:

- 4-port or 8-port 10/100 dual speed switch
- AC power adapter
- Mounting kit for wall mount
- Installation guide


## How TO USE THE 4 OR 8-PORT 10/100 DUAL SPEED SWITCH

## LED's

The LED's on the front panel show the following status:

- Status of the switch's power supply
- Connection speed of 10 Mbps or 100 Mbps
- Data activity on the segment
- Full/half duplex operation mode


## Power

Green

OFF No power.
$10 \mathrm{Mbps} / \mathrm{Hdx} / \mathrm{Act}$
Green

Flashing Green

The system detects the power signal.

A good connection is established, and the 10 Mbps link pulse is detected. The operation mode is negotiated at full duplex.

The port operates in full duplex, indicating that data is being

Amber

Flashing Amber

Off
received or transmitted.
A connection is established, and the 10 Mbps link pulse is detected. The operation mode is negotiated at half duplex.

The port operates in half duplex, indicating that data is being received or transmitted. No link established.
$100 \mathrm{Mbps} / \mathrm{Hdx} /$ Act
Green

Flashing Green

A good connection is established, and the 100 Mbps link pulse is detected. The operation mode is negotiated at full duplex.
The port operates in full duplex, indicating that data is being received or transmitted.

| Amber | A good connection is established, <br> and the 100 Mbps link pulse is <br> detected. The operation mode is <br> negotiated at half duplex. |
| :--- | :--- |
| Flashing Amber | The port operates in half duplex, <br> indicating that data is being <br> received or transmitted. |
| Off | No link established. |

## Connecting to a desktop

The ports are used for connecting the switch to the desktops, to form a small network. You can build the network as the figure shows. To improve the network efficiency, it is better to have 200 Mbps full duplex operation between the server and switch if the LAN adapter on the server can operate in full-duplex mode.

## Connecting to a Switch or a Hub

Switch-to-switch or switch-to-hub connections are made by connecting the uplink port of 10/100 Dual speed switch to a port of the other hub/switch.
With 100Base-TX, the maximum network length is approximately 205 meters with UTP cable. The maximum length between hubs or switch-to-hub is 100 meters.

## RJ-45 10/100 Dual Speed Switching Ports

There are 4 or 8 RJ- 45 ports on the front panel. The $10 / 100 \mathrm{Mbps}$ speed and full/half duplex modes of the ports are automatically determined when users connect the switch to 10Base-T and 100Base-TX devices.

## Uplink Port

One uplink connector (MDI) on the front panel allows users to connect to a switch or a hub, using straightthrough Category 5 twisted pair cable as figure shown.

## WALL MOUNT

The 4 or 8 -port 10/100 Dual speed switch can be mounted to the wall or to the flat surface

- Screw one of the enclosed $1 / 2$-inch wood screws into the surface, leaving approximately $1 / 4$-inch of the threads exposed.
- Hang the switch on the wall using the keyholes provided on the bottom of the switch.


## Fcc compliance statement

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the instructions provided with the equipment, may cause interference to radio and TV reception. The equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If you suspect this equipment is causing interference, turn your switch on and off while your radio or TV is showing interference. If the interference disappears when you turn the switch off and reappears when you turn the switch on, something in the switch is causing interference.

You can try to correct the interference by one or more of the following measures:

- Plug the computer which has the equipment installed into a different power outlet so that the equipment and the receiver are on different branch circuits.
- Reorient the receiving radio or TV antenna where this may be done safely.
- If necessary, you should consult the place of purchase or an experienced radio/television technician for additional suggestions.


## Safety instrutions

1. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
2. This product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding type plug.
3. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
4. If an extension cord is used with this product, make sure that the total ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
5. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
6. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to servicing to service personnel's.

## TECHNICAL INFORMATION

Standards Compatibility
ISO/IEC 802.2-3
IEEE 802.3
IEEE 802.3u

## Interfaces

RJ-45 fully shielded connector for 10Base-T and 100Base-TX Fast Ethernet

## Physical

8-port 10/100 Dual Speed Switch
Width 219 mm (8.62 in.)
Height $\quad 26 \mathrm{~mm}$ (1.02 in.)
Depth $\quad 101 \mathrm{~mm}(3.98 \mathrm{in}$.)
Weight $\quad 0.8 \mathrm{~kg}(1.76 \mathrm{lb}$.
4-port 10/100 Dual Speed Switch
Width $\quad 158 \mathrm{~mm}(6.22 \mathrm{in}$.)
Height $\quad 26 \mathrm{~mm}$ (1.02 in.)
Depth $\quad 101 \mathrm{~mm}(3.98 \mathrm{in}$.)
Weight $\quad 0.6 \mathrm{~kg}(1.32 \mathrm{lb}$.

8-port 10/100 Dual Speed Switch

| Input Voltage | $120 \mathrm{VAC} @ 60 \mathrm{~Hz}$ |
| :--- | :--- |
|  | or $230 \mathrm{VAC} @ 50 \mathrm{~Hz}$ |
| Output Voltage | $12 \mathrm{VDC} @ 1.2 \mathrm{~A}$ |
| Power consumption | 11.2 W |

## 4-port 10/100 Dual Speed Switch

| Input Voltage | 120 VAC @ 60 Hz |
| :--- | :--- |
|  | or 230VAC @ 50 Hz |

## Environmental Specifications

Operating temperature $0^{\circ}$ to $40^{\circ} \mathrm{C}$
Storage temperature $-20^{\circ}$ to $70^{\circ} \mathrm{C}$
Operating Humidity $\quad 10 \%$ to $90 \%$ RH
Storage Humidity $\quad 10 \%$ to $95 \%$ RH
Electromagnetic Emission
FCC Class A, CE Class A, VCCI Class A

Safety Approval<br>UL/CUL, TUV

## Five-Year Limited Warranty

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## To Contact Digi

For prompt response when calling for service information, have the following information ready:

- Product serial number and rev
- Date of purchase
- Vendor or place of purchase

You can reach Digi LAN technical support at (408) 744-2751.

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